Appendix D-1

***Sample of Information that DOTD includes in their consultant contracts ***

CONTRACT IDENTIFICATION

The Consultant's Professional Engineer/Surveyor registrant of the State of Louisiana, who is responsible for the Project shall sign (using his registered name), date, and seal all project documentation. Refer to Louisiana Revised Statute (LRS) 37:681 through 37:703 and Title 46: Part LXI relating to Professional Engineering and Professional Surveying requirements.

PROJECT DESCRIPTION

The Project as covered by this Contract shall consist of providing all necessary engineering and related services required to ***.

SCOPE OF CONTRACT SERVICES

The various Tasks to be performed by the Consultant for this Project are described more specifically as follows:

The services to be rendered for this Project shall consist of the following Stage(s) and Part(s):

These are the contract possibilities that DOTD uses. Adjust as necessary

Stage 0: Feasibility Studies

Part I: Feasibility Study

Part II: Environmental Inventory

Stage 1: Planning/Environmental

Part I: Corridor Study

Part II: Line and Grade Study

Part III: Environmental Evaluation

(a) Categorical Exclusion

(b) Environmental Assessment (EA)

(c) Environmental Impact Statement (EIS)

Part IV: Conceptual Design

Part V: Scope and Budget Development

Stage 3: Design

Part I: Surveying Services

(a) Topographic Survey

(b) Title Research Reports

(c) Property Survey

(d) Title Updates

(e) Right-of-Way (R/W) Maps

(f) Title Take-Off

Part II: R/W Acquisition and Utility Relocation

Part III: Preliminary Plans

Part IV: Final Plans

Part V: Operational Services

Part VI: Inspection Services

Part VII: Construction Proposal

Part VIII: Phase II Environmental Site Assessment

Appendix D-1

Stage 5: Construction

Part I: Construction Support Part II: Shop Drawings

STAGE 0: FEASIBILITY STUDIES

Part I: Feasibility Study- Shall consist of all services required to..... Use scope provided in ad

Part II: Environmental Inventory- Shall consist of all services required to.... Use scope provided in ad

STAGE 1: PLANNING/ENVIRONMENTAL

Part I: Corridor Study

Optional: Select parts which apply

Corridor Study- Shall consist of all services required to perform route location studies for the Project describing all possible alternative routings with appropriate exhibits outlining advantages, disadvantages and costs of each and a recommendation of the preferable alignment based on traffic services, costs and impacts on the community. A Corridor Public Hearing (CPH) shall be held on the recommended and alternate corridors developed under this study. Specifically, the work under this Part consists of the following major items:

- 1. Assemble topographic maps and aerial photographs of the area as necessary to complete the study.
- 2. Review previous engineering reports and previous studies of routes through the area in accordance with accepted practices for utilizing such information.
- 3. Review sub-surface information available from previous explorations and from geological maps.
- 4. Assemble information regarding railroads, navigable canals, levees, drainage outfall pipes and channels, electrical transmission lines, gas transmission lines, water supply lines and other existing and/or proposed major utilities.
- Assemble data on existing and/or proposed land use and historical or other cultural features which should be preserved.
- 6. Conduct an office and field review through the area to determine and identify the physical and/or manmade features affecting the corridor location.
- 7. Prepare estimates of right-of-way (R/W) costs for each corridor alignment based on values of properties furnished by the LPA
- 8. Prepare cost estimates of construction based on per-mile construction costs of similar construction.
- 9. Review each corridor, taking into consideration as to how the social, economic and environmental factors shall be effected by construction of the facility within the corridor and the extent such factors shall have on existing developments, all in accordance with the applicable provisions of Volume 7, Chapter 7, Sections 2 and 5 of the Federal Aid Policy Guide.
- 10. Compare the alternate corridors on the basis of traffic service, estimated construction and the R/W costs, disturbance of property and utility lines, and conformity with plans for future lane use.
- 11. Prepare a corridor location report setting forth the findings and interim conclusions of the studies previously enumerated.
- 12. Attend such conferences and meetings with public officials affected by the corridor locations as may be designated by the LPA for DOTD.
- 13. Prepare such layouts and maps as may be required by the LPA for DOTD for a CPH(s).
- 14. Attend CPH(s) to be called by the LPA including DOTD for review of the proposed corridor locations.

Part II: Line and Grade Study- Shall consist of all engineering services required to: 1) inspect and investigate the project area; 2) assemble data, and 3) study the existing alignment and grade for the express purpose of developing a more desirable line and grade for the proposed new roadway. Any proposed alignment change must have the prior written approval of the Responsible Charge before proceeding with any topographic surveys along the new alignment. Throughout the course of this study the Consultant shall be required to confer with local officials in the area affected and shall maintain close liaison with the Responsible Charge.

A final typewritten report shall be prepared based on information derived from this study and one original copy shall be submitted to the Responsible Charge who will submit it to DOTD's Chief Engineer at the time or prior to the request for a Pre-Design Planning Conference. This report shall include, but not be limited to: 1) a drainage cost estimate, 2) an apparent cost of R/W required, 3) a recommended section for the proposed improvement and; 4) a construction cost estimate.

Part III: Environmental Evaluation

Part III (a) Categorical Exclusion

Part III (b) Environmental Assessment (EA)

Part III (c) Environmental Impact Statement (EIS)

STAGE 3: DESIGN

Part I: Surveying Services

Part I (a) Topographic Survey-Shall consist of all services required to make a complete topographic survey, in English units of measure, as required for the proper design and layout of the Project. The DOTD's requirements which shall govern this survey are specified in the current edition of the DOTD's <u>Location and Survey Manual</u>.

The survey shall include, but not be limited to the staking of centerline when required and when physically possible and, where this is not possible, to the running of all ground traverses necessary to compute and establish centerline. Aerial photogrammetry may be used when feasible and by written agreement with the DOTD in developing the topographic surveys. This work shall include, for the control of the field survey and later use, the establishment of referenced iron rods along the Project, as may be necessary, to define the centerline and of a referenced system of bench marks on a closed level circuit. The survey shall also include the location and establishment of ownership of all utilities in the way of construction as specified in the manual. The Project survey control and horizontal alignment shall be based on the Louisiana State Plane Coordinate System, (NAD-83-92), as determined by G.P.S. observation.

Part I (b) Title Work – Title work shall be performed by a consultant listed on the DOTD Real Estate Section's approved Title work panel list and shall consist of obtaining the necessary Title Research Reports.

The term "Title Research Report" is defined as a report of the ownership of the current property owner(s) with addresses, acquisition data, assessment and tax information, description of the property, conveyances of full ownership, conveyances of other rights (servitudes, leases, restrictions, etc.), existing R/W, recorded plats, and copy of the last acquisition. One Title Research Report shall be obtained for each parcel.

The original and three paper copies and one electronic copy of the Title Research Reports shall be furnished to the Responsible Charge who will transmit it to the DOTD PM along with the Final R/W Map submittal.

Part I (c) Property Survey-Shall consist of all Investigations, Studies, and Field Property Surveys required for the preparation of Base R/W Map. The Field Property Survey shall be based on the same survey control as the Topographic Survey. Upon completion of the property survey, the consultant shall notify the Responsible Charge, in writing, and provide (*If state route: an electronic text file listing coordinates and descriptions of all found monuments,*) a "PDF" copy of all documents (plats, maps, etc.) used to determine property line locations and a "PDF" copy of title take-offs or title research reports used to determine property line locations. Consultant shall also provide a sketch in Microstation (must look like DOTD CAD Conform if done in AutoCAD for non-state routes) and "PDF" formats showing all surveyed property lines and existing right of way with ties to project centerline.

Part I (d) Title Updates-Shall consist of obtaining Updates of the originally acquired Title Research Reports, if the Reports are more than six months old. These Updates shall be used in the preparation of the final R/W Maps and also by the LPA in acquiring title to the property required for the construction project.

Part I (e) R/W Maps-Shall consist of all services required to complete the Base and Final R/W Maps, described more specifically as follows:

The Base R/W Map shall show the adopted project centerline, all existing R/W, limits of construction, appropriate topography (residences, commercial buildings, structures, etc.), parcel line locations and ownerships, and required taking lines, with ties to the adopted project centerline. Individual parcel metes and bounds and precise area calculations are not required at this time, however, the approximate area of each required parcel and remaining area shall be determined and shown on the Base Map. These Maps shall be in the same standard format and shall form the basis for the Final R/W Map. Specifically, this work shall be performed in accordance with all principles and objectives set forth in the latest issue of the DOTD's Location and Survey Manual, although currently acceptable surveying standards and methods, as approved by the DOTD Location and Survey Administrator, may be used. For purposes of a joint review meeting, the Base R/W Map along with one copy of each of the Title Reports used in preparation of the Base R/W Map, shall be furnished at approximately 60% completion, and reviewed by a joint team. Appropriate revisions recommended for inclusion in the Final R/W Map shall be addressed by the Consultant.

The Final R/W Map preparation shall include all activities necessary to complete the Final R/W Map and shall be performed in accordance with the requirements specified in the latest issue of the DOTD's <u>Location and Survey Manual</u>. The Final R/W Map shall be the Base R/W Map as described above, and shall also include all revisions recommended by the Joint Review Team, parcel metes and bounds, parcel acquisition blocks, parcel areas, remaining areas, Lambert coordinates of all breaks in the required R/W and P.C.'s and P.T.'s of curves, and shall be accompanied by an electronic file containing the DOTD COGO program input commands for creating parcel descriptions suitable for review by the DOTD's Real Estate Section.

Part I (f) Title Take-Off is defined as a report of the deed of ownership of the current property owner, and all survey documents, (plats, maps, etc.) associated with the current ownership deed. One Title Take-Off may be obtained for each parcel, if necessary, to expedite commencement of field work. The Title Take-Off is not considered a part of the Title Research Report and may be performed by the Surveyor.

A more detailed description of the work items shall be provided during the pre-design meeting.

Part II: R/W Acquisition and Utility Relocation- Shall consist of all services required to.... Copy and paste from ad.

Part III: Preliminary Plans

Preliminary Plans- Shall consist of all engineering services required for the completion of Preliminary Plans and cost estimates for the Project, all under a schedule for completion which shall be in conformity with the contract time specified elsewhere in this Contract or established by supplemental agreement. Specifically, the work under this Part consists of the following major items:

1. The assembly and study of existing data, including improvement studies, boring information, if any, traffic data available through the DOTD or the LPA, and such other data as can be located through efforts of the Consultant.

If Topo Survey by Consultant – Use these next 3 paragraphs

a. The design criteria for this project shall be mutually determined by the Responsible Charge's, the
Consultant's and DOTD's personnel at a Pre-Design Conference to be held at DOTD's
Headquarters Administration Building in Baton Rouge at the conclusion of Part I (a), Topographic
Surveys and prior to the commencement of this Part.

b. A Pre-Design Planning Conference Form setting forth the design criteria for this project shall be completed at this conference and a copy shall be furnished to the Consultant. This conference shall be arranged by the DOTD's project manager upon his receipt of a written request from the Responsible Charge. A blank copy of this form shall be furnished to the Consultant. The Consultant shall complete those portions of the form which can be completed from information derived during the performance of the topographic survey.

The preparation of location plans for subgrade soil borings that, in the judgment of the Consultant, may be necessary for design of the Project. The Consultant shall also prepare additional location plans as may be required by the Responsible Charge for conducting additional borings deemed necessary by the Responsible Charge.

Use this paragraph for New Bridge Construction Only

The performance of a cost analysis as required, determining the most economical structure design for the particular location of this Project, and the preparation of a corresponding report in reproducible form for the Responsible Charge's use.

If Bridge, Use thru (c)

The preparation and submittal of a synopsis of electronic data processing applications for the design of bridges are sent to the Responsible Charge. It will be ultimately sent to the DOTD's Bridge Design Engineer for his approval prior to their use. The synopsis shall include the following:

- a. A general explanation of each electronic data processing application to be used, and certification by the Consultant that it is maintained in accordance with the latest <u>AASHTO LRFD Bridge Design Specifications</u>.
- b. The name of the developer or the name of the company providing services to the Consultant for each electronic data processing application.
- c. An account of the Consultant's experience and the experience of other organizations or agencies that use each electronic data processing application.

The preparation of Preliminary Plans for the Project shall be in accordance with the requirements outlined in the latest AASHTO LRFD Bridge Design Specifications and in the current editions of DOTD's Roadway Plan Preparation Manual, Bridge Design Manual, General Guide for Bridge Plan Preparation, and Hydraulics Manual. Statements in the Manuals which may be in conflict with requirements specified in the main body of this Contract shall be considered as superfluous information and not applicable to this Contract. Either Two Or If a Bridge Three sets of these plans shall be submitted to the Responsible Charge who will transmit them to the DOTD Project Manager for preliminary examination and comments after they have been developed to show all information required for a Plan-in-Hand inspection and, upon receipt of any such comments, the Consultant shall revise the plans accordingly. The Consultant shall then submit to the Responsible Charge all computer-generated original reproducibles of the Preliminary Plans. The Plans shall be dated and stamped "Preliminary" for further review, DOTD will use to develop their internal prints necessary for a complete Plan-in-Hand field inspection with members of the DOTD, the LPA and other interested parties, when so named herein, at a time and date mutually agreed to in advance by all parties.

Subsequent to the Plan-in-Hand inspection, the Consultant shall make all changes in the plans, as necessary, to reflect agreements reached at this Stage. The plans shall show the existing right-of-way and any taking lines required for additional right-of-way, and shall be referenced to the centerline of the Project. The Consultant shall then submit revised computer-generated original reproducibles of the plans to the Responsible Charge.

Specifications for the Project shall be in accordance with the latest edition of <u>Louisiana Standard</u> <u>Specifications for Roads and Bridges</u>, amended to comply with the current practices of the DOTD.

The preparation of estimates of construction contract costs based on estimated quantities developed for the Preliminary Plans.

The preparation of a sequence of construction for the Project (if necessary).

Use this Paragraph if Permits, Navigable Waterways/Wetlands Req'd

The preparations of all permit drawings necessary for incorporation into the LPA's application for a permit to cross navigable waterways and wetlands. Such drawings shall be original, reproducible drawings. The format of these drawings shall comply with the U. S. Coast Guard's or U. S. Corps of Engineer's standards.

The design format for this improvement shall comply with the criteria prescribed in 23 CFR 625, Design Standards for Highways. The format of the plans shall conform to the standards used by the DOTD in the preparation of its contract plans for items of work of similar character, including plans for all drainage and utilities affected.

Design for Preliminary Plans shall be done in English units of measurement.

Part IV: FINAL PLANS

Final Plans- Shall consist of all services required for the preparation of Final Plans, specifications, and estimates [**and ratings of bridge structures], all meeting the standard requirements of the DOTD as to general format and content. Specifically, the work under this Part consists of the following major items:

- 1. The design and preparation of completed detailed Final Plans drawn to acceptable scales for the Project. At a minimum, the plans shall include designs and/or details for all grading, pavement, drainage, intersections, traffic control and structures. Bar bending details and schedules are to be included in these plans as applicable. The Final Plans shall show construction limits and final R/W taking lines. The earthwork cross sections shall also show R/W taking lines and existing utilities.
 - It is the desire of the LPA that all sanitary and storm drainage, which may be required, be incorporated into the LPA's plans and the construction contract. If the Consultant designs the sanitary or storm drainage for others, approval must be obtained from the owner of all such utilities before initiating design for same. If the design is furnished to the Consultant by the owner for incorporation in the plan assembly, neither the Consultant nor the LPA shall be liable for the functioning of sanitary or storm drainage due to its design.

The Consultant shall compute earthwork mathematically (by computer or otherwise) and provide it to the Responsible Charge. Methods which are not subject to a precise mathematical check shall not be permitted. A tabulation of elevations and distances of all break points on the design template shall also be provided by the Consultant.

The preparation and submittal of construction cost estimates based on the Final Plans.

If Bridge, New Construction, Use next 5 paragraphs

Bridge hydraulics shall conform to the procedures outlined in the latest edition of the DOTD's <u>Hydraulics Manual</u> amended as follows:

Bridge backwater and water surface profiles shall be calculated according to the latest edition of the FHWA computer program WSPRO, Water Surface Profile, (HY-7). The bridge scour calculations shall be performed according to the latest edition of the FHWA manual Evaluating Scour at Bridges, (HEC-18). The grade of the bridge and approach roadway shall be established according to the procedures outlined in the Hydraulics Section Design Memorandum, Procedure for Determining Roadway Grade, dated April 26, 1995.

The performance of a complete "as-designed" structural analysis of the load-carrying capacity of all superstructure structural components, except cast-in-place and precast slab spans to determine the respective inventory load, operating load, and Louisiana's posted vehicle ratings. Ratings shall be in accordance with the latest DOTD's <u>Bridge Design Manual</u>. The rating shall be performed by the same person who did the design.

The original and one (1) copy of a bound rating report shall be provided. It shall include a summary rating section, a plan and profile of the bridge, and all rating calculations arranged such that each member section is sketched adjacent to the appropriate member section, load and stress data or shall be in an alternate format if proposed by the Consultant and agreed upon by the DOTD in advance of execution of the analysis. All pages shall be numbered sequentially. The original of all calculations shall be submitted with the report.

Controlling inventory, operating, and Louisiana posted vehicle ratings shall be placed on the structure general notes sheet of the Final Plans.

The submittal to the Responsible Charge of original unsigned reproducible drawings of the Final Plans for Advanced Check Print (ACP) review and special provisions for review.

The preparation of all special specifications required.

After ACP's have been reviewed and comments incorporated, Final Plans shall be submitted accompanied by a properly indexed, neatly arranged, bound copy of all design computations used in developing the pay quantities and the drainage design data for culverts and storm sewers. The submittal shall be accompanied by a written certification from the Consultant that a detailed check of such computations by qualified personnel has been made prior to submission.

The Title Sheet for Final Contract Plans shall be reproduced on high-quality, 4-mil, double-matte film using a plotting or reproduction process that fuses the graphics to ensure durability. All other Final Plan Sheets may be reproduced on high-quality 24 lb. Premium Bond paper for submittal to the Responsible Charge. Repeated handling and friction due to stacking of plans shall not smear, flake or rub off the graphics. Improper plotter settings and plotter wear may cause inconsistent durability of the drawings. The Consultant shall test samples of the submitted drawings for durability. Advance samples of matte films may be submitted with the ACPs; however, the Contract Plans shall be tested separately. Failures shall result in rejection of the submittal. Additions or changes shall be made with a permanent type of waterproof ink made for this purpose.

The outside measure of each plan sheet shall be 22×36 inches or 23×36 inches with margins measuring not more than 21 inches $\times 34$ inches. Top, bottom, and right hand margins shall be at least $\frac{1}{2}$ inches.

Lettering on plans shall be of adequate size to facilitate a 50% reduction of plans.

All plans submitted by the Consultant shall conform to the quality standards adopted by the DOTD and the Responsible Charge or the DOTD's Project Manager may reject any plans not conforming to these standards.

Design for Final Plans shall be done in English units of measure.

Part V: Operational Services

Operational Services- Shall consist of all services required to.... Copy and paste from ad.

Part VI: Inspection Services

Adiust as necessary:

Inspection Services- Shall consist of all services required to provide plans, specifications, special provisions, shop drawing review/approval, and construction related engineering services for a mechanical, electrical, and structural rehabilitation of ***. The scope of services is more specifically described as follows:

Insert from ad

Part VII: Construction Proposal

Construction Proposal Services - Shall consist of the following:

Pre-bid activities consist of packaging the PS&E documents with other required bidding documents, making plan and specification revisions, when appropriate and producing addenda to be distributed by the DOTD. Normally this operation is performed by the DOTD. The Consultant shall be responsible for many of these tasks for this Project.

The Consultant shall prepare the construction proposal documents in accordance with DOTD's standard practices.

The Consultant shall deliver the bid documents, including the construction proposal, to the Responsible Charge for their review and approval and transmittal to DOTD with enough time to allow DOTD a minimum of eight (8) weeks prior to the scheduled letting to review and approve it. Following DOTD's approval, the Consultant shall deliver the final construction proposal in both electronic format and single sided hard copy a minimum of six (6) weeks prior to the scheduled letting. The final construction proposal shall be prepared in MS Word. The DOTD shall be responsible for reproducing plans and bid documents in sufficient number to accommodate bidders and copies for the DOTD. LPA and the Consultant.

The Consultant shall review the Final PS&E documents for completeness and proper coordination of plans, specification, construction items and quantities prior to delivery of these documents to the Responsible Charge. Any corrections required shall be the responsibility of the Consultant.

The Consultant shall prepare a construction estimate using DOTD's standard bid items. A summary of the estimated quantities shall be furnished by the Consultant to the Responsible Charge who will transmit them to the DOTD Project Manager for entry into DOTD's BIDS system.

The Project Segment quantities shall be broken down according to construction phases and logical sequences of construction. Should the plans not contain enough information to determine the sequences; assumptions shall be made and documented.

The quantities shall be estimated for each phase of excavation, embankment, drainage structures, piling, concrete, base, and paving.

The duration of each of these activities shall be determined based on project specific production rates. These activities shall be linked in a Critical Path Method (CPM) schedule or other approved method to determine the contract time to be specified.

The DOTD shall be responsible for the letting and award of the Project.

Following DOTD's award of the construction contract, the Consultant shall prepare the construction contract documents in accordance with DOTD's standard practice. A draft shall be submitted for DOTD's review. Once the documents are approved by the LPA and DOTD, the Consultant shall submit them to the Responsible Charge who will transmit them to DOTD for execution and distribution.

Part VIII: Phase II Environmental Site Assessment

Phase II Environmental Site Assessment shall.....

STAGE 5: CONSTRUCTION

Use following for all Projects:

Part I: Construction Support- Shall consist of all services required to review and address all Requests for Information (RFI's) from the LPA's Construction Contractor that concern plan/specification clarity or plan/specification error. The Consultant shall be required to respond to all RFI's within forty-eight (48) hours.

Cost recovery for all RFI's due to plan/specification clarity or plan/specification error shall be as noted in the Errors and Omissions clause as established in this Original Contract.

In order to provide efficient construction contract administration and minimize construction delay costs, the Consultant may be required to provide construction on-call support in order to complete the Project. The Consultant shall be available to assist the LPA with information meetings with the Contractor with a twenty-four (24) hour notice. These meetings shall be authorized by the LPA. The Consultant shall be required to respond to and deliver requested minor design changes and plan/specification corrections within seven (7) calendar days. The LPA has not retained the Consultant to make detailed inspections or to provide exhaustive or continuous project review and observation services. This item shall be used only when directed and authorized by the LPA's Responsible Charge. The Consultant does not guarantee the performance of, and shall have no responsibility for, the acts or omissions of any contractor, subcontractor, supplier or any other LPA furnishing material or performing any work on the project.

Use the following shop drawings for inspection contracts

Part II: Shop Drawings- Shall consist of all services required to review all shop drawings and equipment submittals for conformity with the construction contract document, and the distribution of approved submittals as per the project distribution list.

OR-Use the following shop drawings for bridge projects only

Part II: Shop Drawings- if required, the Consultant shall be contracted to provide the structural shop drawing review during construction. Shop drawing review services may be performed under supplemental agreement or a separate contract.

Use following for Shop Drawing Project:

SHOP DRAWING REVIEW:

Review and approval of Contractor submittals, such as shop drawings, product data, and other data, as required by the LPA's contract with the Contractor, but only for the limited purpose of checking for conformance with the design concept and the information expressed in the contract documents. The Consultant's scope shall be limited to a review of quantities, details, dimensions and weights or gauges. Services provided by the Consultant under this Agreement shall be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances. The Consultant's scope shall not include a review of fabrication processes, construction means or methods, coordination of the work with other trades or construction safety precautions, all which are the sole responsibility of the Contractor. The Consultant's review shall be conducted with reasonable promptness while allowing sufficient time in the Consultant's judgment to permit adequate review. Review and approval of these drawings and other required submittals shall not relieve the Contractor of his responsibility under his contract. The Consultant shall not be responsible for any deviations from the contract documents not brought to the attention of the Consultant in writing by the Contractor.

ELECTRONIC DELIVERABLES

The Consultant hereby agrees to produce electronic deliverables in conformance with the DOTD Software and Deliverable Standards for Electronic Plans document. The Consultant is also responsible for ensuring that Sub-Consultants submit their electronic deliverables in conformance with the same standards. The DOTD Software and Deliverable Standards for Electronic Plans document and DOTD CAD Standards Downloads are available via links on the DOTD web site.

The Consultant shall apply patches to CAD Standard Resources and install incremental updates of software as needed or required. The Consultant hereby agrees to install major updates to software versions and CAD Standard Resources in a timely manner. Major updates of CAD standards and software versions shall be applied per directive or approval of the DOTD Design Automation Manager. Such updates will not have a significant impact on the plan development time or project delivery date, nor will they require the Consultant to purchase additional software. Prior to proceeding with plan development, the Consultant shall contact the Responsible Charge for any special instructions regarding project-specific requirements.

In the event that any electronic standard conflicts with written documentation, including DOTD plan-development Manuals, the electronic standard typically governs. The Consultant is responsible for contacting the Responsible Charge should questions arise.

The Consultant shall upload (or check in) electronic deliverables directly into the DOTD ProjectWise repository at each plan delivery milestone. Consultants are responsible for performing certain operations at each milestone including, but not limited to, the following:

- Upload (or check in) CAD plan deliverables to the discipline "Plans" folder
- Apply and maintain indexing attributes to CAD plans (and other deliverables as needed)
- Publish PDF format plan submittals in ProjectWise using automated publishing tools
- Digitally sign PDF format plan submittals in ProjectWise according to DOTD standards and procedures (Final Plans, Revisions and Change Orders). Signatures shall be applied in signature blocks provided with electronic seals and Title Sheets.

Additionally, after reviewing deliverables for each submittal milestone, the Responsible Charge shall notify the Consultant regarding the availability of two automatically-generated informational reports in ProjectWise. These reports document the completion status and other information regarding indexing attributes and CAD standards. Consultants shall take these reports into account and make any necessary adjustments to plans before the next submittal milestone; or sooner, if directed by the Responsible Charge.

Use this for Bridge Projects

QUALITY CONTROL/QUALITY ASSURANCE (QC/QA)

The Consultant shall submit a QC/QA plan document specifically developed for this Project as part of the 24-102 document submittals. The QC/QA plan document must comply with the minimum requirements set in the "Guidance on QC/QA in Bridge Design in Response to NTSB Recommendation (H-08-17)", which was published by the FHWA and AASHTO in August 2011. This guidance can be downloaded from the DOTD's Bridge Design Section website. The QC/QA plan document must be implemented for all bridge design activities in both the design phase and construction support phase of the Project. The Consultant is fully responsible for the QC/QA of their work. All project submittals must include a QC/QA certification that the submittals meet the requirements of the QC/QA plan document.

QUALITY CONTROL/QUALITY ASSURANCE

Use this for other regular design projects which shall lead to construction

The LPA requires the Consultant to develop a Quality Control/Quality Assurance program; in order to provide a mechanism by which all construction plans can be subject to a systematic and consistent review. The Consultant must ensure quality and adhere to established design policies, procedures, standards and guidelines in the preparation and review of all design products. The LPA and DOTD shall provide limited input and technical assistance to the Consultant. The Consultant's plans shall meet or exceed DOTD's Construction Plans Quality Control / Quality Assurance Manual and EDSM No. I. 1.1.24 on Plan Quality. The Consultant shall transmit plans with a DOTD Quality Control/Quality Assurance Checklist, Documentation Manual for Project Delivery, and a certification that the plans meet the DOTD's quality standards.

Use this one for standard non-design projects (planning, environmental etc.)

QUALITY CONTROL/QUALITY ASSURANCE

The DOTD requires the Consultant to develop a Quality Control/Quality Assurance program, in order to provide a mechanism by which all contracted services can be subject to a systematic and consistent review. The Consultant

must ensure quality and adhere to established design policies, procedures, standards, and guidelines in the preparation and review of all design products. The LPA and DOTD shall provide limited input and technical assistance to the Consultant.

Standard plan prints of bridges, culverts and incidental drainage structures prepared by the DOTD. It is the intent of this Contract that standard plans be used insofar as these plans are available in the design of all structures required for the Project. Under the stipulated Contract compensation, the Consultant shall prepare complete designs for structures required on the Project for which DOTD's standard plans are not available.

Prepare construction proposals for the Project from the plans prepared by the Consultant and handle all bidding procedures applying thereto.

Use the following for Construction Support and Shop Drawing Contracts only

GENERAL REQUIREMENTS

Immediately upon receiving authorization to proceed with the work, the Consultant shall receive and review the approved Construction Contractor's proposed progress schedule or bar chart, which shall show in particular, the appropriate items of work, times of beginning and completion by calendar periods, and other data pertinent to each schedule. In addition, this schedule or bar chart shall be arranged so the actual progress can be shown as the items of work are accomplished. It shall be revised monthly and submitted with other monthly data required. One (1) original and two (2) copies of this schedule shall be submitted.

PROGRESS INSPECTIONS

During the progress of the work, representatives of the DOTD and other interested parties, when so named herein, shall have the right to examine the work and may confer with the Consultant thereon. In addition, the Consultant shall furnish, upon request, prints of any specific item of his work for the DOTD inspection. The Consultant shall confer with the Responsible Charge and such other parties, and from time to time may submit sketches illustrating significant features of the work for interim approval.